UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/932,298	08/17/2001	Christina Fu	SUN-P6043	4864

7590 07/14/2005	EXAMINER
Jonathan P Osha	SCHUBERT, KEVIN R

	ART UNIT	PAPER NUMBER
OSHA & MAY LLP	2137	
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DATE MAILED: 07/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

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Office Action Summary	Application No. 09/932,298	Applicant(s) FU ET AL.
	Examiner Kevin Schubert	Art Unit 2137

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _07 June 2005_.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-24_ is/are pending in the application.

  4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-24_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

  a)☐ All   b)☐ Some * c)☐ None of:

  1.☐ Certified copies of the priority documents have been received.

  2.☐ Certified copies of the priority documents have been received in Application No. _____.

  3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
  application from the International Bureau (PCT Rule 17.2(a)).

  * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
  Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
  Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claims 1-24 have been considered.

Claim Rejections - 35 USC § 112

Claim 22 recites the limitation "said merger server". There is insufficient antecedent basis for this

limitation in the claim. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for

the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4,8,12-18, and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Zubeldia,

U.S. Patent No. 6,044,462.

As per claims 1,12, and 16, the applicant describes a method of creating a certificate revocation

list comprising the following limitations which are met by Zubeldia:

a) creating a single CRL that is centralized, said single CRL associated with a certificate authority

(CA) comprising a master server coupled to a plurality of CA clone servers (Col 7, lines 38-40; Fig 6);

b) maintaining said single CRL with said master server (Col 7, lines 14-15; Fig 6);

c) receiving notice, from one of said plurality of CA clone servers, at said master server

containing revocation information regarding a certificate (Col 7, lines 7-11);

d) updating said single CRL according to said revocation information (Col 7, line 66 to Col 8, line

7).

As per claims 2,14, and 17, the applicant describes the method of claims 1,12, and 16, which are met by Zubeldia, with the following limitation which is met by Zubeldia:

Wherein step d) comprises adding said certificate to said single CRL when said revocation information indicates said certificate is revoked, said revocation information associated with a revocation event occurring at one of said plurality of CA clone servers (Col 7, line 66 to Col 8, line 7).

As per claims 3,15, and 18, the applicant describes the method of claims 1,12, and 16, which are met by Zubeldia, with the following limitation which is met by Zubeldia:

Wherein step d) comprises removing said certificate from said single CRL when said revocation information indicates said certificate is valid, said revocation information associated with a revocation event occurring at one of said plurality of CA clone servers (Col 7, line 66 to Col 8, line 7);

The applicant should note that when a clone server reports that a certificate is valid, or reinstates a certificate, the certificate is removed from revoked status and thus disassociated with a list of revoked certificates in the database but still maintained in the database to provide information that the certificate is valid.

As per claims 4 and 21, the applicant limits the method of claims 1 and 16, which are met by Zubeldia, with the following limitation which is met by Zubeldia:

Maintaining said single CRL with a CRL merger service module located at said master server (Col 7, lines 14-15);

As per claims 7 and 13, the applicant limits the method of claims 1 and 12, which are met by Zubeldia, with the following limitation which is met by Zubeldia:

Transmitting said single CRL that is updated to a recipient over a communication network (Col 7, lines 29-37; Col 6, lines 57-59);

Referring to figure 6, a user requests information through a server which communicates with the database and sends the requested information back to the user. The requested information can be a validity check or a CRL (Col 6, lines 57-64).

As per claim 8, the applicant limits the method of claim 1, which is met by Zubeldia, with the following limitation which is met by Zubeldia:

Providing certificate authority services not including maintaining and managing said single CRL at each of said plurality of CA clone servers (Col 7, lines 7-11).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 5,10,11, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zubeldia in view of Parkvall, U.S. Patent Application Publication No. 2002/0080719.

As per claims 5 and 19, the applicant limits the method of creating a CRL as described in claims 1 and 16, which are met by Zubeldia, with the following limitation which is met by Parkvall:

Sending said notice over a secure communications channel (Parkvall: [0004]);

Zubeldia does not disclose sending information over a secure communications channel. Parkvall discloses the notion of Stop and Wait ARQ communication between two parties in which one packet is sent to a recipient and the sender waits for an acknowledgement before sending a second packet. Thus, Parkvall introduces the idea of creating a secure communications channel through acknowledgement signals between a sender and a receiver.

It would have been obvious to one of ordinary skill in the art at the time the invention was filed to

incorporate the ideas of Parkvall with those of Zubeldia because doing so provides the clone servers

assurance that information they send is properly received by the master server and not subject to

transmission failures.

As per claim 10, the applicant discloses the method of claim 1, which is met by Zubeldia, with the

following limitation which is met by Parkvall:

a) at said one of said plurality of clone servers, detecting whether said notice was received at said

master server (Parkvall: [0004]);

b) repeatedly sending said notice until received by said master server (Parkvall: [0004]);

Through Stop and Wait Automatic Response Request (ARQ), an acknowledgement is sent to the

sender or clone server if the message is received (part a). Automatic Response Request also includes

sending a notice to repeat the sending of the message in the case of an error (part b).

As per claim 11, the applicant discloses the method of claim 10, which is met by Zubeldia, with

the following limitation which is met by Parkvall:

Storing said notice if said notice was not received at said master server (Parkvall: [0004]);

Through Stop and Wait Automatic Response Request (ARQ), the message or packet is stored

until confirmation that it has been correctly received at which time the message or packet is deleted.

Claims 5,6,9,19,20, and 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Zubeldia in view of Oracle (Oracle Internet Directory Administrator's Guide. Release 2.0.6. 1999).

As per claims 5,6, and 19, the applicant describes the method of creating a CRL as described in

claims 1 and 16, which are met by Zubeldia, with the following limitation which is met by Oracle:

Sending said notice over a secure communication channel (Page 3);

Zubeldia does not disclose sending information over a secure communication channel. Oracle

discloses the Oracle Internet Directory, a service which provides directory access control. Among the

features of Oracle Internet Directory are providing a secure communication channel through a secure

socket layer (SSL) authenticated access system.

It would have been obvious to one of ordinary skill in the art at the time the invention was filed to

combine the ideas of Oracle with those of Zubeldia because doing so makes the system more robust and

less subject to data manipulation or attacks.

As per claims 9 and 20, the applicant describes the method of creating a CRL as described in

claims 1 and 16, which is met by Zubeldia, with the following limitation which is met by Oracle:

Storing said CRL in a database accessed via a lightweight directory access protocol (LDAP) that

supports a Secure Sockets Layer (SSL) (Pages 1-3);

As per claim 22, the applicant describes the limitations of claim 16, which is met by Zubeldia, with

the additional limitation of an LDAP database. The addition of LDAP is obvious in view of Oracle for the

reasons given in the rejection for claim 9 (see above).

As per claims 23 and 24, the applicant describes the limitations of claim 22, which is met by

Zubeldia in view of Oracle, with the following limitation which is met by Zubeldia:

Wherein said master server adds a certificate to said centralized CRL after said revocation

information by one of said plurality of clone server indicates that said certificate has been revoked (Col 7,

line 66 to Col 8, line 7).

Response to Arguments

Applicant's arguments, see Remarks filed 6/7/05, with respect to claims 1,12, and 16 have been

considered but are moot in view of the new ground(s) of rejection. Upon further consideration of the

primary reference, Zubeldia does teach the limitations of claims 1,12, and 16 and there is no need to

combine the applicant's admitted prior art. The applicant describes his CA to be comprised of a master server, CA clone servers, and a database which are met by Zubeldia.

Zubeldia discloses a method for creating a single CRL in a database (610 of Fig 6) which is maintained by a master server (606 of Fig 6). Rather than having to review multiple CRLs to determine the validity status of a certificate, a user or client can make a request to a single centralized CRL (Col 6, lines 50-56). The examiner points the applicant to Fig 6. The system includes CA clone servers (602A,602B, and 602C), a master server (606), and a database (610) which function to provide a collective evaluation of a certificate. The system as a whole is functioning as a single CA to a user (616 of Fig 6).

Applicant's arguments with respect to claims 5,10,11, and 19 have been fully considered but they are not persuasive. The examiner argues there is no motivation to combine Parkvall. The examiner disagrees. Parkvall discloses a method of securely transmitting data. Zubeldia discloses transmitting data but is silent as to how the data is transmitted. There is motivation to combine Parkvall with Zubeldia because doing so strengthens the system by providing assurance that transmitted information is properly received and not subject to transmission failures.

Conclusion

THIS ACTION IS MADE NON-FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Schubert whose telephone number is (571) 272-4239. The examiner can normally be reached on M-F 7:30-6:00.
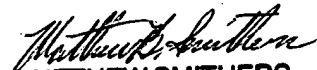
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571) 272-3868. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application

Information Retrieval (PAIR) system. Status information for published applications may be obtained from

either Private PAIR or Public PAIR. Status information for unpublished applications is available through

Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC)

at 866-217-9197 (toll-free).

KS

MATTHEW SMITHERS
PRIMARY EXAMINER
Art Unit 2137